Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Benthic substrate type off California

1.2. Summary description of the data:

The National Marine Sanctuary Program (NMSP) updates and revises the management plans for each of its 13 sanctuaries. This process, which is open to the public, enables each site to revisit the reasons for sanctuary designation and assess whether they are meeting their goals, as well as to set new goals consistent with the mandates of the National Marine Sanctuaries Act. Issues raised by the public during this process are evaluated and a determination is made as to whether they will be incorporated into the updated plan. Many of these issues focus on topics such as the implementation of marine zoning or sanctuary boundary adjustments, both of which require information on the distribution of resources within and around the sanctuary. Recognizing this, NMSP and NOAA's National Centers for Coastal Ocean Science (NCCOS) formalized an agreement to collaborate in the revision process by developing such information through a series of biogeographic assessments conducted in selected sanctuaries. The resulting products are then supplied to sanctuary managers and staff for use in the policy and decision making process. This collaborative effort began along the west coast of the U.S. with the Cordell Bank, Gulf of Farallones, and Monterey Bay national marine sanctuaries, and is herein centered on the Channel Islands National Marine Sanctuary (CINMS).

1.3. Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

1.4. Actual or planned temporal coverage of the data:

2006-01

1.5. Actual or planned geographic coverage of the data:

W: -123.994751, E: -116.893797, N: 38.511889, S: 31.888952

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) vector digital data

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NCCOS Scientific Data Coordinator

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

National Centers for Coastal Ocean Science

2.4. E-mail address:

NCCOS.data@noaa.gov

2.5. Phone number:

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

NCCOS Scientific Data Coordinator

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2005-01-01 00:00:00 - The substrate data ranges from Washington to the U.S.-Mexico border (320-48.50 latitude) and from 50-200 km from the shoreline (excluding estuaries). Benthic substrate data for California encompasses nearly 165, 000 km2 of the continental shelf and slope and are classified into approximately 33 different habitat types. The level of spatial resolution varies across the dataset based on the quantity and quality of the original data sources used to construct this substrate map. As such, fine scale inaccuracies may exist throughout the range of the data. In addition to assessing the distribution of substrate types throughout the southern California region, the map was used as an input for deterministic habitat suitability models (HSM) for a select group of fishes and invertebrates. Linking the 33 classes of habitat types to species life history information from scientificliterature was difficult; thus, a separate substrate attribute was used for habitat suitability modeling which defined the substrate as either hard or soft. Model results for invertebrates were reviewed in June 2004 by a panel of experts. They expressed concern that the map underestimated the amount of hard bottom, most notably at depths between 0-30 m along the mainland south of Point Conception and around the Channel Islands. Additionalhard substrate data were then provided by scientists from UCSB who converted non-digital substrate maps developed by the Minerals Management Service (MMS) into a format suitable for use within a GIS. These data extend from Morro Bay to the U.S.-Mexico border and were combined with the NMFS substrate data, resulting in a better estimation of hard substrate in southern California. (Citation: Moss Landing Marine Laboratory -Substrate data)

- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.3. Data access methods or services offered
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/39578

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: http://www.nmfs.noaa.gov/op/pds/documents/04/111/04-111-01.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

National Centers for Coastal Ocean Science

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

http://coastalscience.noaa.gov/datasets/ccma/biogeo/cinms/Chap_2_Data/Substrate.zip

- 7.3. Data access methods or services offered:
- 7.4. Approximate delay between data collection and dissemination:
 - 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

- 8.1.1. If World Data Center or Other, specify:
- 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:
- 8.2. Data storage facility prior to being sent to an archive facility (if any):

National Centers for Coastal Ocean Science - Silver Spring, MD

- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.